

Form PTO-1449

U.S. Department of Commerce  
Patent and Trademark OfficeINFORMATION DISCLOSURE CITATION  
(Use several sheets if necessary)Atty. Docket No.  
59154-A/JPW/GJG/AXSerial No.  
09/768,479Applicant  
Virginia W. CornishFiling Date  
January 24, 2001Group  
1614

## U.S. PATENT DOCUMENTS

Examiner Initial			Date	Name	Class	Subclass	Filing Date if Appropriate
KK		5 9 2 8 8 6 8	07/27/99	Liu, H. et al.			RECEIVED
							JUN 11 2002

## FOREIGN PATENT DOCUMENTS

TECH CENTER 1600/2900

		Date	Country	Class	Subclass	Translation	
						Yes	No

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

KK	Lin, H., et al. Dexamethasone-Methotrexate: An Efficient Chemical Inducer of Protein Dimerization <sup>May</sup> In Vivo. 2000. J.Am.Chem.Soc. 122:4247-4248 ( <i>Exhibit 2</i> )
	Kopytek, S.J., et al. Chemically Induced Dimerization of Dihydrofolate Reductase by a Homobifunctional Dimer of Methotrexate. <sup>April</sup> 2000. Chem Biol 7:313- 321 ( <i>Exhibit 3</i> )
	Firestone, S.M., et al. Using an AraC-Based three-hybrid system to detect biocatalysts in vivo. <sup>May</sup> 2000. Nature Biotechnology. 18, 544-547 ( <i>Exhibit 4</i> )
	Pelletier, J.N., et al. Oligomerization domain-directed reassembly of active dihydrofolate reductase from rationally designed fragments. 1998. Proc.Natl.Acad.Sci.USA. 95, 12141-12146 ( <i>Exhibit 5</i> )
↓	Ladant, D., Karimova, G. Genetic systems for analyzing protein-protein interactions in bacteria. 2000. Res. Microbiol. 151, 711-720 ( <i>Exhibit 6</i> )
EXAMINER <i>Kathy L. Han</i>	DATE CONSIDERED 12/20/02

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Applicant: Virginia W. Cornish  
 U. S. Serial No.:09/768,479  
 Filed: January 24, 2001  
 Group Art Unit: 1614

Exhibit A

K. Ken connections 12/20/02

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 	U.S. Serial No. 10/056,874, filed January 24, 2002 <i>(Exhibit 7)</i>
	U.S. Serial No. 10/084,388, filed February 25, 2002 <i>(Exhibit 8)</i>
	U.S. Serial No. 10/132,039, filed April 24, 2002 <i>(Exhibit 9)</i>

EXAMINER

*Kathleen Ken*

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12/20/02

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## U.S. PATENT DOCUMENTS

Examiner Initial	Document Number							Date	Name	Class	Subclass	Filing Date if Appropriate
KL	5	7	3	6	3	4	3	April 7, 1998	Landry			
	5	4	6	8	6	1	4	Nov. 21, 1995	Fields et al.			
	5	3	1	4	8	1	7	May 24, 1994	Schultz, P.			
↓	5	1	9	4	5	9	4	March 16, 1993	Kwawli et al.			

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		Document Number	Date	Country	Class	Subclass	Translation					
							Yes	No				
KL	9	9	1	0	5	1	0	March 4, 1999	WO			
	9	9	1	0	5	0	8	March 4, 1999	WO			
	9	8	1	3	3	5	3	April 2, 1998	WO			
	9	7	3	1	1	1	3	August 28, 1997	WO			
	9	6	3	0	5	4	0	October 3, 1999	WO			
↓	0	7	4	2	0	1	5	November 13, 1996	EP			

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

KL		Austin DJ, et al. Proximity versus allosteric: the role of regulated protein dimerization in biology. 1994. Chem Biol. 1(3): 131-6 (Exhibit 11)
		Belshaw PJ, et al. Controlling protein association and subcellular localization with a synthetic ligand that induces heterodimerization of proteins. 1996. Proc. Natl Acad Sci USA 93(10):4604-7 (Exhibit 12)
↓		Belshaw PJ, et al. Controlling programmed cell death with a cyclophilin-cyclosporin-based chemical inducer of dimerization. 1996. Chem. Biol. 3:731-738 (Exhibit 13)

## EXAMINER

Kathleen Ken

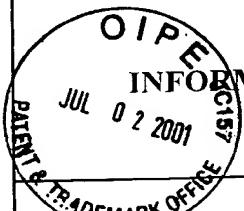
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KK	Choi J, et al. Structure of the FKBP-12-Rapamycin complex interacting with the binding domain of human FRAP. 1996. Science 273(5272):239-42 (Exhibit 14)
	DeGrado WF, et al. Screening, selection and design: standing at the crossroads in three dimensions. 1997. Current Opinion in Structural Biology 7:455-456 (Exhibit 15)
	Diver SR, et al. Single-step synthesis of cell-permeable protein dimerizers that activate signal transduction and gene expression. 1997. J. Am. Chem. Soc. 119: 5106-5109 (Exhibit 16)

EXAMINER	Kathleen Han	DATE CONSIDERED	12/28/02
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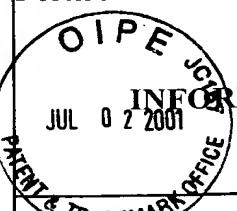
VK		Ho SN, et al. Dimeric ligands define a role for transcriptional activation domains in reinitiation. 1996. Nature.
		382(6594):822-6 (Exhibit 17)
		Holsinger LJ, et al. Signal transduction in T lymphocytes using a conditional allele of Sos. 1995. Proc. Natl. Acad. Sci. USA
		92:9810-9814 (Exhibit 18)
↓		Hung DT, et al. Understanding and controlling the cell cycle with natural products. 1996. Chem. Biol.
		3:623-639 (Exhibit 19)

EXAMINER	DATE CONSIDERED
Kathy Lai	12/28/02

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**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

KK	Klemm JD, et al. Dimerization as a regulatory mechanism in signal transduction. 1998. Annu. Rev. Immunol.
	16:569-92 (Exhibit 20)
	Liberles SD, et al. Inducible gene expression and protein translocation using nontoxic ligands identified by a mammalian three-hybrid screen. 1997. Proc. Natl. Acad. Sci. USA
	94(15):7825-7830 (Exhibit 21)
↓	Licitra EJ, et al. A three-hybrid system for detecting small ligand-protein receptor interactions. 1996. Proc. Natl. Acad. Sci. USA
	98:12817-12821 (Exhibit 22)

EXAMINER *Kathy Ken* DATE CONSIDERED *12/28/02*

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KK	Pedersen H, et al. A method for directed evolution and functional cloning of enzymes. 1998. Proc. Natl. Acad. Sci. USA
	95:10523-10528 ( <b>Exhibit 23</b> )
	Pruscha MN, et al. Mechanistic studies of a signaling pathway activated by the organic dimerizer FK1012. 1994. Chem. Biol.
	1:163-172 ( <b>Exhibit 24</b> )
↓	Schreiber SL. Chemical genetics resulting from a passion for synthetic organic chemistry. 1998. Bioorganic & Medicinal Chemistry
	6:1127-1152 ( <b>Exhibit 25</b> )

EXAMINER	<i>Kayla L</i>	DATE CONSIDERED	12/28/02
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KK	Spencer DM , et al. Controlling signal transduction with synthetic ligands. 1993. Science 262(5136):1019-1024 (Exhibit 26)
	Spencer DM, et al. Functional analysis of Fas signaling in vivo using synthetic inducers of dimerization. 1996. Curr Biol. 6(7):839-47 (Exhibit 27)
↓	Spencer DM, et al. A general strategy for producing conditional alleles of Src-like tyrosine kinases. 1995. Proc. Natl. Acad. Sci. 92:9805-9809 (Exhibit 28)

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KK	Stockwell BR, et al. TGF-beta-signaling with small molecule FKBP12 antagonists that bind myristoylated FKBP12- TGF-beta type 1 receptor fusion proteins. 1998. Chem Biol.  5(7):385-95 ( <b>Exhibit 29</b> )						
	Stockwell BR, et al. Probing the role of homomeric and heteromeric receptor interactions in TGF-beta signaling using small molecule dimerizers. 1998. Curr Biol  8(13):761- 70 ( <b>Exhibit 30</b> )						
	Winkler T., et al. Confocal fluorescence coincidence analysis: An approach to ultra high-throughput screening. 1998 Proc. Natl. Acad. Sci. USA 96:1375-1378 ( <b>Exhibit 31</b> )						
	Yang, J., et al. Small-molecule control of insulin and PDGF receptor signaling and the role of membrane attachment. 1997 Curr. Biol. 8:11-18 ( <b>Exhibit 32</b> )						
	Zlokarnik G, et al. Quantitation of transcription and clonal selection of single living cells with beta-lactamase as reporter. 1998, Science 279(5347):84-8 ( <b>Exhibit 33</b> )						
↓	Search Report dated May 14, 2001 corresponding PCT International Application No.  PCT/US01/02285 ( <b>Exhibit 34</b> )						
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